AMENDMENTS TO THE SPECIFICATION

Please insert the following paragraphs before paragraph [0001] and amend paragraphs [0026] to [0030], [0037] to [0039], [0043], [0044], [0051], [0052], and [0057] to read as follows. Insertions are shown underlined while deletions are ~~strikethrough~~.

This application is the U.S. National Phase under 35 U.S.C.§371 of International Application PCT Patent Application No. PCT/AU2003/001214, filed on September 16, 2003, which claims priority to Australian Patent Application No. AU20020951396, filed on September 16, 2002. The contents of which are all herein incorporated by this reference in their entireties.

All publications, patents, patent applications, databases and other references cited in this application, all related applications referenced herein, and all references cited therein, are incorporated by reference in their entirety as if restated here in full and as if each individual publication, patent, patent application, database or other reference were specifically and individually indicated to be incorporated by reference.

[Para 26] As best seen in Figures 2 and 3, the shoe 10 has a composite structure with three layers. The middle layer provides a core (or frame) 30 for attachment of the other two layers 40 and 50. The core 30 is made of any of the ~~aluminium~~ aluminum alloys commonly used for horseshoes. It provides most of the strength and shape retention for the shoe. The core 30 is manufactured by pressing a preform from a 4mm thick ~~aluminium~~ aluminum sheet, with the toe clip 20 extending out from the toe 16, then bending the toe clip up into position, and finally heat treating the core to harden it.

[Para 27] The upper layer 40 is a polyurethane mat approximately 2mm thick which is tightly bonded to the top face 31 of the core 30 and provides a shock absorbing bed for a horse's hoof to which it would be attached. The lower layer 50 is a polyurethane mat approximately 4mm thick which is tightly bonded to the bottom face 34 of the frame 30 and provides a high friction, wear resistant sole. It should be noted that Figure 4 shows

the metal core 30 with no polyurethane attached. Layers 40 and 50 may be preformed before being adhered to the core 30, but it is preferred for the layers 40 and 50 to be injection ~~moulded~~ molded directly onto the core 30.

[Para 28] The shock absorbing elastomeric materials used in layers 40 and 50 may be any suitable materials but are preferably selected from the range of polyurethanes widely supplied and known by the skilled person. They are preferably a thermoplastic urethane suitable for injection ~~moulding~~ molding applications and sold under the name Teton 90 by Urethane Compounds Pty Ltd in Australia. Use of a Chemloc (trade mark) primer from Lord Chemicals is also preferred in order to increase the bond between the polyurethane and the metal core.

[Para 29] The upper face 31 of the core 30 incorporates an array of indentations 32. These take the form of relatively gently dished depressions or concavities aligned in an arc across the toe 16 and down the side arms 11 and 12. Each indentation 32 is ~~centred~~ centered on the ~~centreline~~ centerline of the face 31. The indentations 32 are circular with a diameter about half the width of face 31. Their diameter may be between 25% and 75% of the width of face 31. The depth of the depressions is 2mm, which is approximately a quarter of their diameter, but this could be varied to between 10% and 70%, preferably between 20% and 50%. Although the indentations 32 could be steeply walled, a shallow wall angle is preferred.

[Para 30] The lower face 33 of the core 30 incorporates an array of protrusions 34. These take the form of relatively gently raised mounds or humps aligned in an arc across the toe 16 and down the side arms 11 and 12. Each protrusion is ~~centred~~ centered on the ~~centreline~~ centerline of the face 33. The protrusions 34 are circular with a diameter about half the width of face 33. Their diameter may be between 25% and 75% of the width of face 33. The height of the protrusions is 2mm, which is approximately a quarter of their diameter, but this could be varied to between 10% and 70%, preferably between 20% and 50%. Although the protrusions 34 could be steeply walled, a shallow wall angle is preferred.

[Para 37] For example, while the core 30 of the preferred embodiment is ~~aluminium~~ aluminum, it may instead be formed from any suitable rigid material such as for example steel, magnesium, titanium or a ~~fibre~~ fiber reinforced composite plastics material. While punching and press forming operations are used to form the core 30 in the preferred embodiment, alternatives could be used such as die casting or injection ~~moulding~~ molding.

[Para 38] Also, whereas the indentations 32 and protrusions 34 of the preferred embodiment are circular and gently dished or humped with a depth and height respectively about a quarter of their diameter, the invention also envisages the indentations and protrusions being of alternative shapes. Also, instead of a toe clip 20, a horseshoe of the invention may ~~utilise~~ utilize quarter clips, which rise from the outer wall 13 of the side arms 11 and 12, to restrict sliding of the hoof on the shoe.

[Para 39] In a particularly preferred embodiment of the invention, the layers 40 and 50 are applied to the core 30 at the same time in an injection ~~moulding~~ molding operation and the polyurethane applied is also caused to cover the outer wall 13, inner wall 14 and the toe clip 20. A particular advantage from providing the polyurethane covering on the outer wall 13 is that if a horse strikes its hoof against another leg, either its own or another horse's in a race, there is significantly less damage done to the leg receiving the blow.

[Para 43] The upper layer 140 is a polyurethane coating approximately 2mm thick and the lower layer 150 is approximately 4mm thick. Both layers 140 and 150 are injection ~~moulded~~ molded at the same time in a common die directly onto the core 130. During the same ~~moulding~~ molding process a polyurethane coating is ~~moulded~~ molded onto the curved peripheral vertical faces which form the outer wall 113 and the inner wall 114 of the shoe.

[Para 44] The horseshoe has a downwardly facing main face or under-surface 146 into which is ~~moulded~~ molded a series of raised rims, lips, ribs and depressions. The under-surface 146 is that surface which in use bears on the ground and, for convenience, the under-surface 146 may be referred to herein as the sole face because it forms the outer face of the sole of the shoe. The shoe has, on the obverse side to the under-surface 146, an upper surface 144 which in use is held in contact with a hoof of a horse. The shoe is nailed to the hoof in the normal manner.

[Para 51] Around the toe portion 202 of the core 130, the outside rim 185 is raised to a greater extent than is the inside rim 183. In other places (~~eg~~ e.g., around the heel portions 203) the outside rim and the inside rim have substantially the same heights throughout. The ridges 188 to 193 accordingly have respective sloped crests 225 to 230, as those crests slope from near the crest of the outside rim down to the crest of the inside rim.

[Para 52] Holes 198 to accommodate nails are provided through the core 130 and corresponding holes are also present in the polyurethane coating 168 to enable placement of nails to affix the shoe to the horse. The shoe 110 shown in Figures 5 to 8 ~~utilises~~ utilizes only six of the twelve holes 198 provided in the core 130.

[Para 57] The core 130 shown in Figures 9 to 13 is made of any suitable ~~aluminium~~ aluminum alloy commonly used for horseshoes. The core 130 is manufactured by die casting followed by a heat treatment operation. Many suitable alloys and heat treatment conditions are known to those skilled in making ~~aluminium~~ aluminum horseshoes.